



DEPARTMENT OF THE NAVY  
OFFICE OF THE CHIEF OF NAVAL OPERATIONS  
2000 NAVY PENTAGON  
WASHINGTON, D.C. 20350-2000

IN REPLY REFER TO

5100

Ser N454/8U589088

12 Nov 98

From: Chief of Naval Operations

Subj: NAVY OCCUPATIONAL SAFETY AND HEALTH (NAVOSH) STRATEGIC  
PLAN AND OVERSIGHT INSPECTION PROCESS

Ref: (a) CNO ltr Ser N454/6U598734 of 13 Nov 96  
(b) OPNAVINST 5100.23 Series

Encl: (1) Navy Process Review & Management Process

1. The purpose of this letter is to announce a new methodology for operation, management, measurement and improvement of occupational safety and health performance throughout the Navy. The Process Review and Measurement System (PR&MS) was developed under the direction of the CNO NAVOSH Quality Council as an improved method to measure the quality of NAVOSH program management, per reference (a).
2. Although the new PR&MS represents significant change for the field activities inspected and their chains of command, it does not direct new NAVOSH regulatory requirements or policy. NAVOSH performance will be assessed in each of the following five key processes: Mishap Prevention, Regulatory Compliance, Supervision, Training and Self-Assessment. Commands that provide major services/support necessary for other commands to be able to carry out their respective NAVOSH Programs will also be evaluated in a sixth separate key process, Customer-Focused Support. In addition, a seventh key process to address injury cost control will be developed during FY99. Details are provided in enclosure (1).
3. The Naval Inspector General NAVOSH Oversight Inspection Unit (NOIU) is conducting some PR&MS inspections in FY99 with full implementation to assess all seven key processes in FY00. Reference (b) addresses the scope of the NOIU and its role in reviewing Navy's total NAVOSH Program.
4. This letter will be posted on the CNO N454 World Wide Web Page to help Navy activities change to this improved process (ref: <http://206.5.146.100/n45/branch/n454/>). Request you notify your activities accordingly. Safety Management Training is available through the NAVOSH and Environmental Training Center.

Subj: NAVY OCCUPATIONAL SAFETY AND HEALTH (NAVOSH) STRATEGIC  
PLAN AND OVERSIGHT INSPECTION PROCESS

5. My point of contact for the NAVOSH Strategic Plan initiative is [REDACTED]. The point of contact at the Office of the Naval Inspector General for NAVOSH Oversight Inspection matters is [REDACTED] MSC, USN, NAVIG-00E1, at [REDACTED], Commercial [REDACTED] or NOIU Director, [REDACTED] MSC, USN, at [REDACTED] or Commercial [REDACTED].

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## NAVY PROCESS REVIEW AND MEASUREMENT PROCESS

### #1 THE MISHAP PREVENTION PROCESS MODEL (30% OF OVERALL RATING)

Mishap Prevention - actions taken to identify and control unacceptable risks.

1. Compile/Report Mishap and Hazard Data
  - Mishap reports
  - FECA data
  - Exposure assessments
  - Medical surveillance
  - Reported hazards
    - workers
    - management
    - OSH staff
    - external agents
    - literature
2. Analyze Mishap/Hazard Data
  - Frequency
  - Severity (human costs, dollar costs, mission impact)
  - Exposure potential
  - Location
  - Responsibility
  - Type
  - Trends
  - Patterns
  - Any anomaly
3. Analyze Significant Processes/Areas (Various approaches may be employed - Preliminary Hazard Analysis, Systems Safety Review, Job Safety Analysis, Process Safety Analysis, less formal approaches, etc., as appropriate for processes analyzed)
  - Hazards
  - Causes
  - Responsibilities
  - Control alternatives
4. Report Key Data/Analysis to Process Owner
5. Process Owners Review Reports
6. Identify/Consider Potential Controls
  - Administrative/Programmatic
  - Engineering
  - Process
  - Training
  - PPE
  - Procedural
  - Product substitution

## The Mishap Prevention Process Model - continued

7. Conduct Value Assessment
  - Loss potential
  - Cost
  - Expected benefit
  - Morale implications
  - Feasibility
  - Customer acceptance
  - Public image
  - Labor/management implications
8. Select Alternative(s)
  - Select control(s)
  - Do nothing
  - Prioritize implementing actions
9. Implement Control(s)
  - Issue policy
  - Issue procedures
  - Install barriers
  - Modify facilities/equipment
  - Modify procedures
  - Conduct training
  - Utilize new product
10. Assess Impact of Controls
  - Review data
  - Inspect process/worksites
  - Solicit customer feedback
  - Compare results to expected benefits
11. Modify Control(s) As Needed
  - Select alternative control(s)
  - Modify existing control(s)
  - Eliminate control(s)

## Performance Measures for the Mishap Prevention Process

1. Mishap Rates - the mishap rate chosen to measure Mishap Prevention performance is the Injury/illness Incidence Rate (IIR), defined as follows:

- $$IIR = (A \times 200,000) / M + C$$

(where A = total injuries/occupational illnesses including fatalities, lost/no-lost time cases, first aid cases reported on OPNAV Form 5102/7 (Log of Navy Injuries and Occupational Illnesses; where M = the command's military personnel end strength for the reporting period multiplied by 2,000 (Note: 2,000 is the appropriate multiplier only when an annual IIR is being calculated. This multiplier should be adjusted up or down in proportion to the time period in question for any IIR calculations for time periods other than annual. For example, use 1,000 for a six month IIR, use 10,000 for a five year IIR); and where C = the total man hours worked by civilian employees of the command during the reporting period, as provided by the Comptroller)

2. Quality Assessment of Command Mishap Prevention Program

Evaluate the command's Mishap Prevention performance by assessing its implementation of specific elements of the Mishap Prevention process model. The process model elements recommended for evaluation, and proposed evaluation methods, are provided below:

- Compile/Report Mishap and Hazard Data -

Is appropriate mishap and hazard data compiled?

- Injuries/illnesses
- Property damage cases
- Stressor exposure
- Safety hazards                      - Near misses

A list of possible sources from which the evaluator may gather actual mishap and hazard data for comparison purposes includes:

- Clinic logs
- Material property damage reports (OSH office)
- FECA tables
- JAG reports
- NAVFAC property loss reports
- Property accountability reports (Controller)
- Crane accident reports
- Inspection reports
- Ships' CAS reports
- Employee Hazard Reports (EHR)
- Abatement logs

- Industrial hygiene reports

(Evaluate by taking a sample of mishaps/hazards from the above data sources and then confirming the consideration of those mishaps/hazards in the mishap prevention process. Numerical values should then be assigned to this element, based on the number of sample mishap and hazard items actually included in command mishap prevention analysis databases.)

- Analyze Mishap/Hazard Data and Significant Process Areas

Does the analyses:

- Occur at an appropriate frequency?
- Provide data at appropriate levels of management responsibility?
- Identify the most frequent and/or severe risks?
- Provide a valid comparison of current performance versus expected/historical performance?
- Provide useful recommendations for performance improvement?
- Provide other useful analysis not listed above?

- Process Owner Response to Analyses

Characterize process owner response to reports of mishap analyses as one of the following:

- Unsatisfactory awareness of/response to analyses reports
- Satisfactory awareness of/response to analyses reports
- Takes additional internal analysis/action beyond that suggested by analyses reports

(Evaluate by personal interview with selected process owners, review of process owner documentation, and field confirmation of actions claimed (where appropriate).)

**#2    THE REGULATORY COMPLIANCE PROCESS MODEL**  
**(20% OF FINAL SCORE)**

**Regulatory Compliance - conformance to NAVOSH requirements**

- 1.    Determine Regulatory Requirements**
  - Review regulations
  - DOD/Navy directives
  - Military exclusions
  - Review, determine if changes needed
  - Legal considerations
  - Regulatory interface
  - Community relations
  
- 2.    Develop Compliance Strategies**
  - Training requirements
  - Feasibility
  - Medical impact
  - Prioritization
  - Time frame for implementation
  - Consequences of non-compliance
  - Difference between new and current requirements
  - System safety review
  
- 3.    Identify and Provide Resources**
  - Organizational structure
  - Cost determination
  - Budgeting
    - internal
    - customer cost
  - Facility requirements
  
- 4.    Execute Compliance Strategy**
  - Communicate requirements
    - training
  
- 5.    Monitoring**
  - Documentation
  - Data analysis
  - Report compliance status
  - Feedback
  - Initiate improvement efforts
  - Confirmation of corrective action

**Performance Measures for the Regulatory Compliance Process**

- NOSHIP/NOIU Inspection results

# 3    THE SUPERVISION PROCESS MODEL  
(20% OF OVERALL RATING)

Supervision - those actions taken to plan, organize, direct, oversee and evaluate the activities of subordinates and Command personnel to safely accomplish work

The Supervision Process Model incorporates three different but complementary/interrelated components.

Component #1 - Sequential actions/steps associated with the accomplishment of specific jobs/tasks by subordinates.

1.    Analyze Tasks

- Identify hazards
  - physical (mechanical, heat, vibration, noise, location, radiation, etc.)
  - chemical (hazardous materials)
  - biological (disease)
- Evaluate hazards
  - identify personnel at risk
  - consult involved employees
  - consult peers/managers
  - review technical documentation
  - consult professional staff
  - draw upon personal knowledge/experience
- Identify measures needed to control/eliminate hazards
  - engineering
  - administrative
  - PPE
- Identify OSH compliance requirements
  - Navy
  - OSHA
  - local documents
  - NAVOSH
- Determine required personnel qualifications
  - training
  - physical/medical
  - experience

2.    Organize to Safely Accomplish Tasks

- Select qualified personnel
- Determine work sequence
- Coordinate with support organizations

3.    Direct the Accomplishment of Tasks

- Communicate objectives to assigned personnel
  - schedule
  - interface with other operations
  - location
  - problem reporting
- Assign jobs within the task



- Provide job training
  - verbal
  - written
  - discuss potential hazards
  - discuss compliance
- 4. Evaluate Task Performance
  - Observe workers
  - Identify process variance
  - Enforce proper implementation of controls
  - Receive feedback
    - from employees
    - from related organizations
    - from customers (internal/external)
  - Assess efficiency of controls
- 5. Adjust Process As Required

Component #2 - Continuing actions to evaluate the overall performance of personnel over time.

1. Determine General Expectations For Work Unit
  - injury/illness prevention
  - process improvement
  - cost avoidance initiatives
2. Set Performance Standards Both Verbally and In Writing
  - objective/quantifiable
  - measure behavior, not results, at lower levels in the organization
  - use subordinates' performance as factor for supervisors
  - measure positives as well as negatives
3. Acquire Information Needed To Assess Performance
  - inspections
    - supervisor
    - OSH staff
    - IH surveys
  - process reviews
  - mishap data/information
  - employee self-assessment
4. Assess Performance Against Standards
5. Discuss With Employee
  - strengths
  - weaknesses
  - improvement strategy
6. Document Final Assessment
7. Initiate Reward/Remedial Actions as Appropriate

3. Component #3 Integration of OSH Throughout The Command  
Assess proactiveness of Command HQ, Command, upper management, supervisors and workers and their integration and involvement with OSH into core business processes.

1. Review requirements
2. Scope of involvement
  - meetings/councils/training/strategic planning
3. Level of interface CO has with
  - upper management, middle mgt., workforce and unions
  - Assess if Command has an informal CO/upper mgt. walk-through of workspaces
4. Command awareness of compensation costs, property damage assessments, mishap rate reductions, etc.
5. Assess upper Echelon strengths, and support/guidance
6. Determine command climate and philosophy related to OSH
7. Evaluate customer/command feedback systems
8. Reduction in accidents due to awareness or improved procedures
9. Determine ownership of processes

#### Performance Measures For The Supervision Process

1. Presence of OSH Elements in Performance Standards (% coverage and quality of standards) - the following should be used to evaluate the presence of OSH elements in performance standards.
  - Is OSH addressed?
  - Communication of OSH information and expectations to members of the work unit
  - Is performance monitored to determine if OSH requirements and expectations are met?
  - Do the standards address actions to be taken to improve the OSH performance of the work unit?
  - Do the standards require the establishment of OSH standards for all members of the work unit?

(Where commands utilize self-directed work teams in lieu of traditional supervisors, performance standards adopted by self-directed work teams will be evaluated.)

#### 2. Assessment of Employee Understanding of OSH Expectations

- Is employee properly using appropriate PPE for the work?
- Can the employee demonstrate an awareness of hazards in the work area, and hazard control measures?
- Is the employee using OSH resources available to report/address hazards (e.g. supervisor, OSH staff, safety committee, EHR, etc.)?

#### 3. Assessment of OSH Integration Initiatives or Improved Outcome Measures:

- Is higher echelon providing OSH guidance?
- Is there active OSH interchange of information within the chain (both above and below)?
- Does CO's immediate staff show knowledge of OSH issues?
- Does CO review OSH related reports(i.e., program costs, incident rates, compensation costs)?
- Has cmd. suite attended OSH training with subordinates or peers?
- Has Cmd. and upper mgt. buy-in and open support of OSH been instrumental in reduced cost of business and improved workforce productivity?

#4 THE TRAINING PROCESS MODEL  
(15% OF OVERALL RATING)

Training - conveyance of information to enable personnel to carry out their personal responsibilities safely and in compliance with applicable NAVOSH regulations.

1. Identify Requirements and Needs

- Explicit
  - required by regulations
  - required by directives
  - individual development plan
- Implicit
  - lessons learned
  - process improvements
  - process changes
  - needed to execute work
  - labor/management/customer relations
- Type
  - initial
  - refresher
  - job qualification
  - awareness
- Timing/frequency
  - before assignment
  - annual
  - monthly
  - other
- Recordkeeping

2. Identify Audience

- Upper-level management
- Mid-level management
- Supervisor
- Worker
  - new
  - journeyman
  - new assignment
- Customer
  - tenants
  - contractors
  - visitors
- Labor organizations

3. Develop Specific Information to be Delivered

- Relate to each target audience
- Limit to applicable requirements for each target audience

4. Identify Media
  - Lesson plans
  - Classroom
  - On-the-job training
  - Programmed instructions
  - Videotape
  - Correspondence courses
  - Interactive computer assisted
  - Stand-up/tailgate meetings
  - Other
5. Assemble Resources Needed to Provide Training
  - Funding
  - Time
  - Media
  - Facilities
  - Qualified instructor
6. Deliver Training
  - Schedule
  - Provide
    - NSETC
    - OSHA
    - college
    - on-the-job training
    - on-site training
    - job training
    - rate training
    - correspondence courses
    - stand-up/tailgate meetings
  - Track completion
7. Evaluate Effectiveness
  - Worksite observations
  - Retention testing
    - short-term
    - long-term
  - Mishap rate for target accident type
  - Student critique
  - Other feedback
    - OSH office
    - labor organizations
    - managers
8. Modify Training as Required

## Performance Measures for the Training Process

### 1. Matrix Match Against Requirements

- Compile Data Sources
  - Industrial hygiene surveys
  - Military manning documents
  - Command mission/function statements
  - Command mishap experience
  - Command occupation physical qualification statements
  - Etc.
- Determine the following
  - Does a formal OSH Training Plan exist?
  - Would execution of the plan ensure delivery of all required training?
  - Would execution of the plan ensure delivery of appropriate specific hazard recognition and control training?
  - Is course content documented by formal lesson plans that are approved by appropriate OSH/technical personnel?
  - Is training executed in accordance with the plan?
  - Is the training provided evaluated in terms of:
    - Appropriateness of course content?
    - Instructor effectiveness?
    - Behavior of trainees in the workplace?
  - Are evaluation results used to improve training?

### 2. Employee Interface/Challenges

- Compile Data Sources
  - Industrial hygiene surveys
  - Military manning documents
  - Command mission/function statements
  - Command mishap experience
  - Command occupation physical qualification statements
- For Target Processes/Occupations, Determine if:
  - Employees are accomplishing their work in a safe manner.
  - Employees are aware of job hazards and OSH requirements.
  - Employees are complying with regulatory requirements pertinent to their job assignment.
  - Employee failures are due to: \*\*\*
    - Inadequate training.
    - Employee failure to comply with known requirements.
    - Other factors. (lack of tools, time, etc., needed to perform work)

- Employee successes are due to: \*\*\*
  - Effective training.
  - Knowledge/experience not attributable to the command's training program.
  - Other factors. (close supervision, reward system, peer pressure, etc.)

\*\*\* NOTE: For these items, if the failure/success is due to training, utilize the employee observation/interview results to evaluate the TRAINING key process. If the failure/success is due to other (nontraining) factors, utilize the employee observation/interview results to support the evaluation of another appropriate key process.

(Evaluate by identifying several appropriate occupations within the command, then observing/interviewing randomly selected employees within each identified occupation or process.)

#5 THE SELF-ASSESSMENT PROCESS MODEL  
(15% OF OVERALL RATING)

Self-Assessment - a comprehensive internal evaluation of how an OSH program meets the requirements of its internal/external customers.

1. Identify Program Elements to be Evaluated

- Mishap Prevention
  - mishap investigation
  - risk assessment
  - hazard abatement
- Adequacy of resources (internal/external)
  - OSH staff
  - funding
  - medical/HRO support
  - PWC support
  - other
- Supervision
  - management involvement/example
  - performance evaluation
- Personnel participation
  - worker input mechanisms
  - union involvement
  - PPE use
- Training
  - formal
  - informal
  - communication
- Regulatory Compliance
  - all applicable regulations
  - deficiency abatement
- Injury Cost Control
- Customer Focused Support (OSH support commands only)

2. Develop Assessment Plan for Each Element

- Develop assessment strategy
- Identify element customers and customers needs
- Identify element performance criteria and indicators
- Develop assessment tools/procedures
- Develop assessment schedule
- Determine reporting mechanisms and who receives reports
- Identify and provide for resources needed to assess
  - people
  - data
  - time
  - technical competence



## The Self-Assessment Process Model - continued

### 3. Conduct Assessment of Each Element

- Conduct/Compile information
- Analyze
  - trends
  - patterns
  - causes
  - priorities
  - actual observed performance vs. desired performance
- Develop conclusions/recommendations
- Prepare/submit reports
  - documentation as required by regulations
  - reports to appropriate responsible persons

### 4. Adjust/Improve Self-Assessments

- Obtain/Evaluate customer feedback
- Develop improvements
- Implement Improvements
- Advise customers of changes

## Performance Measures for the Self-Assessment Process

### 1. Review of Command Self-Assessment Program

- Has the command established a formal self assessment process?
- Is a self-assessment of each key NAVOSH process conducted annually?
- Does the self-assessment include a data-driven analysis of key NAVOSH process trends/patterns?
- Does the self-assessment drive process improvements?
- Does the self-assessment identify further process improvement opportunities for programs which already meet basic requirements?
- Does the self-assessment identify/quantify the actions and resources needed to correct process deficiencies?

#6 THE CUSTOMER-FOCUSED SUPPORT PROCESS MODEL (OSH SUPPORT)  
(0-100% - TO BE SCORED SEPARATELY, AS APPLICABLE)

Customer-Focused Support - providing OSH support, services, and guidance that meet customer needs.

1. Identify Your Customers
  - Commands receiving service
  - Students
  - Patients
  - Managers within commands
  - Workers/employees
  - Laboratories
  - Contractors
  - Your boss
2. Identify Your Customer's Needs (As Perceived by the Servicing Command)
  - Requirements (mandated programs)
  - Non-disruptive service
  - Schedule and frequency
  - Reports and documentation
  - Usefulness and reliability of products/services
  - Cost vs. value
  - Consultation with command management
  - Responsiveness
  - Policy/guidance
  - Anticipation of unexpressed customer needs
  - Communication of available services
3. Evaluate Current Product/Services
  - Policy/guidance
  - Schedule and frequency
  - Reports and documentation
  - Usefulness and reliability of products/services
  - Requirements (mandated programs)
  - Non-disruptive service
  - Cost vs. value
  - Consultation with command management
  - Responsiveness
  - Communication of services available
4. Determine Resources Required to Provide Product/Services
  - People
  - Funding
  - Time
  - Consumables
  - Facilities

## The Customer-Focused Support Process Model - continued

- Contracts
  - Support organizations
  - Procedures and policies
  - Training and education
  - Communication and Information Technology
  - Equipment
5. Develop Customer Survey
    - Assess knowledge level of people being surveyed
      - tailor questions accordingly
    - Develop questions around the following:
      - what do you need from me?
      - what do you do with what I give you?
      - do gaps exist between what I give you and what you need?
  6. Develop Survey Implementation Plan
    - Determine survey format and delivery method
    - Identify forms and checklists
    - Develop schedules
    - Train surveyors/conduct dry run
    - Refine survey
  7. Conduct Survey
  8. Evaluate Survey Results
    - Determine gaps between product/services provided and the customer's needs/requirements/expectations
  9. Improve Delivery of Products/Services to Better Meet Customer Needs
    - Develop partnership with customer to eliminate problems
    - Provide new services
    - Eliminate Unneeded services
    - Re-prioritize efforts
    - Improve efficiency/effectiveness of current product/service
    - Adjust customer/supplier expectations
    - Identify alternative provider of service
  10. Identify Potential Improvements
    - Customer feedback
    - Data
    - Field Observations
    - Follow-up Survey

## The Customer-Focused Support Process Model - continued

### 11. Pursue Continuous Improvement of Process

- Ensure customer satisfaction

### Performance Measures for the Customer-Focused Support Process

- Has the command established a formal process for determining customer needs?
- Are customer needs surveyed:
  - At least triennially?
  - At least annually?
  - Significantly more often than annually?
  - By written surveys?
  - By meetings/workshops?
- Do customer surveys/workshops/etc. result in the development of initiatives to improve the products or services being delivered?
- Are customers advised of survey results and improvement initiatives planned/undertaken in response to surveys?
- Are customers involved in the development of improvement initiatives?
- Are improvement initiatives tracked and making progress toward implementation?
- Is customer feedback solicited concerning the effectiveness of changes implemented in response to customer surveys?

#7 THE INJURY COST CONTROL PROCESS MODEL

Under development during FY 99.